

Precipitation.—The average was 1.38 below the normal of the last 15 years; greatest monthly, 3.80, at Charlevoix; least monthly, 0.52, at West Branch.

Wind.—Prevailing direction, northwest.—*N. B. Conger, Sergeant, Signal Corps, Lansing, director.*

MINNESOTA.

Temperature.—Maximum, 65, at Mankato, 22d; minimum, —27, at Saint Vincent and Pokegama Falls, 2d; greatest monthly range, 79, at Saint Vincent; least monthly range, 46, at Farmington and Grand Meadow.

Precipitation.—Greatest monthly, 0.53, at Rolling Green; least monthly, 0.05, at Crookston and Moorhead.

Wind.—Prevailing direction, northwest.—*John Healy, Corporal, Signal Corps, Minneapolis, in charge.*

MISSISSIPPI.

Temperature.—The mean was 2.9 above the normal; maximum, 81, at Vaiden, 5th; minimum, 19, at Louisville, 28th; greatest monthly range, 60, at Vaiden; least monthly range, 42, at Rienzi.

Precipitation.—The average was 1.99 below the normal; greatest monthly, 6.30, at Bay Saint Louis; least monthly, 1.75, at Moss Point.—*R. B. Fulton, Signal Corps, University, director.*

METEOROLOGICAL REPORT OF THE MISSOURI STATE BOARD OF AGRICULTURE.

Temperature.—The mean was about 7.0 above the normal; maximum, 76, at Protom, 1st; minimum, —3, at Cassville, 8th; greatest monthly range, 74, at Protom; least monthly range, 40, at Austin.

Precipitation.—The average varied from about normal in the southern portion to about 2.00 below in the northern portion; greatest monthly, 2.91, at Cairo, Ill.; least monthly, trace, at Conception and Pickering.—*Levi Chubbuck, Secretary of State Board of Agriculture, Columbia, director; A. L. McRae, Sergeant, Signal Corps, assistant.*

NEBRASKA.

Temperature.—Maximum, 82, at Weeping Water; minimum, —6, at West Point.

Precipitation.—In the central part of the state no precipitation or only a trace fell, and it did not exceed 0.50, except at Kimball and Franklin.—*Prof. Goodwin D. Sweeney, Crete, director; G. A. Loveland, Sergeant, Signal Corps, assistant.*

NEVADA.

Temperature.—The mean was 0.5 below the normal; maximum, 73, at El Dorado Canyon, 2d; minimum, 0, at Pioche, 8th; greatest monthly range, 60, at Ely; least monthly range, 27, at Candelaria.

Precipitation.—The average was 1.21 below the normal; greatest monthly, 8.55, at Lewer's Ranch; least monthly, 0.16, at Eureka.

Wind.—Prevailing direction, southwest.—*Prof. Charles W. Friend, Carson City, director; D. C. Grunow, Corporal, Signal Corps, assistant.*

NEW ENGLAND METEOROLOGICAL SOCIETY.

Temperature.—The mean was 6.3 below the normal; maximum, 58, at Plymouth, 21st; minimum, —36, at Orono, 31st; greatest monthly range, 83, at Orono; least monthly range, 40, at Northampton.

Precipitation.—The average was 0.56 above the normal; greatest monthly, 6.16, at Kingston; least monthly, 1.75, at New Hartford.

Wind.—Prevailing direction, northwest.—*Prof. William H. Niles, Boston, Mass., president; Prof. Winslow Upton, Providence, R. I., secretary; J. Warren Smith, Private, Signal Corps, assistant.*

NEW JERSEY.

Temperature.—The mean was 1.6 below the normal; maximum, 56, at Bridgeton, 28d; minimum, 3, at Tenafly, 30th; greatest monthly range, 46, at Tenafly; least monthly range, 30, at Ocean City.

Precipitation.—The average was 0.27 above the normal; greatest monthly, 5.74, at Oceanic; least monthly, 2.34, at Lambertville.

Wind.—Prevailing direction, northwest.—*E. W. McGann, Sergeant, Signal Corps, New Brunswick, in charge.*

NEW YORK.

Temperature.—Maximum, 64, at New York City, 8d, and at Setauket, 4th; minimum, —19, at Ampersand, 3d and 20th; greatest monthly range, 59, at Madison Barracks; least monthly range, 31, at Arkwright.

Precipitation.—Greatest monthly, 6.74, at Turin; least monthly, 0.58, at Fort Niagara.

Wind.—Prevailing direction, northwest.—*Prof. E. A. Fuertes, Dean of the College of Civil Engineering, Cornell University, Ithaca, director; R. M. Hardinge, Private, Signal Corps, assistant.*

NORTH CAROLINA.

Temperature.—The mean was 1.5 above the normal; maximum, 74, at Wilmington, 7th; minimum, 10, at Franklin, 14th; greatest monthly range, 56, at Franklin; least monthly range, 13, at Hatteras.

Precipitation.—The average was 1.26 below the normal; greatest monthly, 6.01, at Hatteras and Norfolk, Va.; least monthly, 0.61, at Wilmington.

Wind.—Prevailing direction, northwest.—*Dr. Herbert B. Battle, Raleigh, director; C. F. von Herrmann, Sergeant, Signal Corps, assistant.*

NORTH AND SOUTH DAKOTA.

Temperature.—The mean was about 9.0 above the normal; maximum, 75,

at Rapid City, S. Dak., 10th; minimum, —25, at Grand Forks, N. Dak., 2d; greatest monthly range, 78, at Woonsocket, S. Dak.; least monthly range, 55, at DeSmet, S. Dak.

Precipitation.—The average was about 0.26 below the normal; greatest monthly, 2.28, at Webster, S. Dak.; least monthly, 0.04, at Fort Buford, N. Dak.

Wind.—Prevailing direction, northwest.—*S. W. Glenn, Sergeant, Signal Corps, Huron, S. Dak., in charge.*

OHIO.

Temperature.—The mean was 0.9 below the average; maximum, 65, at Portsmouth, 11th; minimum, 3, at Newcomerstown, 30th.

Precipitation.—The average was 0.21 deficient; it was 0.18 in excess in the southern section; monthly snowfalls averaged between 10 and 20 inches in the different sections: the greatest in 24 consecutive hours occurred on the 25th and 26th, when from 6 to 10 inches fell in the southern, central, and eastern portions of the state.—*Prof. B. F. Thomas, Columbus, director; C. M. Strong, Sergeant, Signal Corps, secretary and assistant.*

OREGON.

The characteristics of the month were the excess in temperature and the deficiency in precipitation.

Temperature.—The mean was 2.4 above the normal; maximum, 67, at Grant's Pass, 26th; minimum, 0, at Burns, 11th.

Precipitation.—The average was 3.20 below the normal; greatest monthly, 8.81, at Astoria; least monthly, trace, at Silver Falls.

Wind.—Prevailing direction, south.—*Hon. H. E. Hayes, Master State Grange, Oswego, director; B. S. Pague, Sergeant, Signal Corps, assistant.*

PENNSYLVANIA.

Temperature.—The mean was 2 above the normal; maximum, 59, at Charlesville, 11th; minimum, 11, at Dyberry, 29th; greatest monthly range, 25, at Wilkes Barre; least monthly range, 11, at Grampian Hills.

Precipitation.—The average was 1.00 above the normal; greatest monthly, 9.68, at Blue Knob; least monthly, 1.72, at Erie.

Wind.—Prevailing direction, northwest.—*Under direction of the Franklin Institute, Philadelphia; T. F. Townsend, Sergeant, Signal Corps, assistant.*

TENNESSEE.

Temperature.—The mean was normal; maximum, 76, at Lynnville, 2d; minimum, 14, at Rugby; greatest monthly range, 54, at Hohenwald; least monthly range, 34, at Rogersville.

Precipitation.—The average was nearly 1.00 above the normal; greatest monthly, 6.08, at Carthage; least monthly, 2.11, at Fayetteville.

Wind.—Prevailing direction, northwest.—*J. D. Plunket, M. D., Nashville, director; H. C. Bate, Signal Corps, assistant.*

TEXAS.

Temperature.—Maximum, 89, at College Station, 5th; minimum, 10, at Coldwater, 7th.

Precipitation.—Greatest monthly, 4.35, at Longview; least monthly, 0.00, at Durham and Epworth.—*D. D. Bryan, Galveston, director; I. M. Cline, Sergeant, Signal Corps, assistant.*

WISCONSIN.

Temperature.—The mean was 8 above the normal; maximum, 58, at Oshkosh, 10th; minimum, —16, at Hayward, 4th.

Precipitation.—The average was nearly 1.00 below the normal; greatest monthly, 2.16, at Delevan; least monthly, 0.10, at Saint Paul, Minn.

Wind.—Prevailing direction, west.—*R. E. Kerkam, Milwaukee, Sergeant, Signal Corps, in charge.*

Meteorological record of Army post surgeons, voluntary, and other co operating observers, December, 1890.

Stations.	Temperature. (Fahrenheit.)			Precip. in.	Stations.	Temperature. (Fahrenheit.)			Precip. in.
	Max.	Min.	Mean			Max.	Min.	Mean	
Alabama.	0	0	0	Ins.	Arizona—Cont'd.	0	0	0	Ins.
Bermuda [†]	76	24	52.0	1.35	Ash Canyon.....	68	19	47.1	3.78
Bessamer.....	65	24	47.0	1.58	Benson.....	68	34	52.4	1.48
Brownston.....	91	23	58.2	1.70	Bisbee [†]	70	32	48.2	1.99
Citronelle.....	80	29	55.8	1.71	Calabassas.....	.....	.....	.....	1.95
Columbiana [†]	69	22	47.9	1.91	Casa Grande.....	87	45	62.3	0.87
Decatur (1) [†]	2.47	Chino.....	74	22	45.3	.....
Double Spring [†]	69	21	47.3	3.97	Chiri Cahua M't's.....	.....	.....	.....	2.90
Gadsden.....	.....	.....	.....	4.46	Dragoon [†]	2.01
Greenborough.....	69	28	46.3	3.37	Dragoon Summit.....	78	32	55.4	0.18
Livingston(1)*.....	72	24	50.7	1.59	Dos Cabezon [†]	2.31
Mountain Home.....	73	17	43.1	3.16	Dudleyville.....	.....	.....	.....	1.67
Mount Willing.....	71	31	49.5	1.50	Eagle Pass.....	.....	26	42.4	2.10
Mt. Vernon B'ks.....	78	23	52.3	1.58	Farley's Camp.....	36	55.5	4.44	.....
Talladega.....	.....	.....	.....	2.20	Fort Apache.....	66	21	43.2	1.52
Tuscaloosa.....	.....	.....	.....	1.84	Fort Bowie.....	61	24	46.1	2.45
Tuscmibia (1).....	73	23	45.7	2.61	Fort Grant.....	67	30	48.6	2.02
Uniontown.....	74	28	52.3	2.47	Fort Huachuca.....	67	27	47.6	2.70
Valley Head [†]	68	20	42.4	3.84	Fort Lowell.....	83	25	60.6	1.48
Alaska.	.....	.....	.....	.....	Gila Bend (1)*.....	88	52	57.7	1.10
Juneau.....	45	10	29.0	6.86	Gila Bend (2).....	82	50	53.6	1.42
Killisnoo.....	45	16	31.3	3.00	Grand Central Mill.....	.....	.....	.....	1.01
Arizona.	45	16	31.3	3.00	Holbrook [†]	59	19	38.0	1.82
Antelope Valley.....	.....	.....	.....	4.34	Lochiel*.....	67	30	47.4	3.45
Ariz. Canal Co. Dam.	76	37	57.7	1.71	Maricopa.....	72	40	53.2	2.47

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.				
	Max.	Min.	Mean			Max.	Min.	Mean					
Arizona—Cont'd.	o	o	o	Ins.	California—Cont'd.	o	o	o	Ins.				
Mineral Park	2.27	2.27	2.27	Georgetown	66	29	47.4	7.65	Suisun City	80	32	47.9	2.81
Natural Bridge	4.38	4.38	4.38	Gilroy	68	30	48.2	3.84	Sussville	62	12	34.2	3.47
New River	76	39	54.3	Girard	62	33	44.3	3.30	Tehachapi	60	29	41.9	3.48
Oro	1.51	1.51	1.51	Glen Ellen	61	30	45.1	6.23	Tehuma	70	42	51.6	2.88
Pantano	1.54	1.54	1.54	Goshen	70	29	42.8	2.01	Templeton	72	28	48.0	4.24
Payson	1.54	1.54	1.54	Grass Valley	.....	.....	.....	5.86	Towles	60	22	42.6	7.80
Red Rock	0.84	0.84	0.84	Haywards	60	35	45.5	2.65	Tracy	66	33	44.3	1.83
San Carlos	2.63	2.63	2.63	Hollister	78	28	51.3	2.51	Traver	64	33	46.3	2.85
San Simon	56.1	56.1	56.1	Hornbrook	54	18	37.4	1.90	Tropico	88	40	54.4	3.13
Show Low	1.27	1.27	1.27	Hydesville	63	30	40	5.85	Truckee (1)	42	0	26.7	7.30
Simmons	0.44	0.44	0.44	Indio	90	40	64.3	0.22	Tulare	77	32	47.3	2.45
Strawberry	4.99	4.99	4.99	Ione	66	25	45.6	3.49	Turlock	66	32	47.2	1.64
Teviston	1.70	1.70	1.70	Iowa Hill	67	33	48.6	7.34	Vacaville (1)	68	24	44.7	4.14
Texas Hill	36	36	36	Jolom	.....	.....	.....	.....	Vacaville (2)	68	22	44.8	2.92
Tip Top	52.3	52.3	52.3	Julian	65	34	49.9	6.36	Valley Springs	65	34	41.7	3.07
Tucson (1)	55.6	55.6	55.6	Keeler	65	32	46.4	0.16	Venice	63	30	44.1	2.21
Tucson (2)	57.5	57.5	57.5	Keene	65	31	48.5	3.57	Volcano Springs	84	38	60.1	0.47
Walnut Grove	3.45	3.45	3.45	Kingsburgh	66	30	45.7	1.92	Volta	66	33	45.6	0.97
Whipple Barracks	40.6	40.6	40.6	King City	72	28	47.9	1.54	Walla Walla Ck	52	16	36.2	3.85
Willcox	47.5	47.5	47.5	Knight's Landing	70	37	49.9	2.37	Walnut Creek	69	37	46.8	2.70
Wilgus	2.82	2.82	2.82	Lathrop	65	35	49.1	1.47	Westley	66	38	50.0	1.75
Wood Cañon	2.00	2.00	2.00	Livermore	72	34	52.9	3.31	Wheatland	61	30	42.2	2.19
Woodruff	.....	.....	.....	Long Beach	80	41	57.4	0.00	Whittier	81	50	62.2	1.60
Yuma	59.9	59.9	59.9	Los Angeles	83	42	60.2	2.82	Williams	58	32	43.0	1.79
Arkansas	.....	.....	.....	Los Banos (2)	69	34	46.3	1.32	Willow (1)	67	28	43.7	3.14
Arkansas City	48.0	48.0	48.0	Los Gatos (1)	72	32	49.8	4.07	Willow (2)	67	29	43.2	3.45
Conway	44.7	44.7	44.7	Los Gatos (2)	62	33	46.6	4.74	Winters	68	32	46.9	3.71
Dallas	44.2	44.2	44.2	Mammoth Tank	78	40	59.0	0.54	Woodland	79	33	50.6	2.35
Dardanelle	3.30	3.30	3.30	Martinez	62	30	43.0	2.72	Colorado	.....	.....	.....	.....
Devall's Bluff	44.5	44.5	44.5	Milton (near)	56	32	44.0	2.62	Fort Collins	63	6	34.0	0.12
Fayetteville	42.9	42.9	42.9	Marysville	90	35	50.9	2.62	Fort Lewis	50	4	28.9	4.12
Forrest City	50.6	50.6	50.6	Menlo Park	67	32	48.6	2.61	Fort Logan	71	13	40.2	0.00
Fulton	3.44	3.44	3.44	Modesto	72	37	47.6	2.14	Fruitful	52	10	30.7	0.73
Harrisburg	42.4	42.4	42.4	Mojave	72	37	47.6	2.14	Georgetown	50	14	33.0	0.08
Helena (1)	44.3	44.3	44.3	Monson	68	33	44.4	2.60	Rocky Ford	70	6	35.8	0.60
Helena (2)	3.73	3.73	3.73	Montague	56	30	40.1	1.40	San Luis Ex.S'ta	50	—4	25.6	T.
Hot Springs	44.2	44.2	44.2	Monterey	66	32	52.5	2.66	Smoky Hill Mine	.....	.....	.....	.....
Lead Hill	41.7	41.7	41.7	Hotel del Monte	69	35	53.1	0.00	Connecticut	.....	.....	.....	.....
Lonoke	49.1	49.1	49.1	Mullans	.....	.....	.....	.....	Birmingham	.....	.....	.....	.....
Mount Nebo	46.3	46.3	46.3	Napa	62	30	47.3	3.41	Canton	48	1	21.6	3.80
Newport (1)	.....	.....	.....	National City	83	40	60.7	2.43	Colchester	53	2	26.7	4.45
Newport (2)	42.4	42.4	42.4	Newark	66	35	50.3	2.55	Falls Village	.....	.....	.....	.....
Osceola	44.4	44.4	44.4	Newhall	78	32	53.8	1.94	Fort Trumbull	52	5	29.5	3.69
Ozone	4.71	4.71	4.71	Newman	67	38	48.0	1.17	Hartford (1)	46	0	23.5	3.30
Pine Bluff	42.5	42.5	42.5	Pajaro	73	26	56.5	2.18	Hartford (2)	50	—4	28.9	4.12
Russellville	45.2	45.2	45.2	Paso Robles	70	26	56.5	2.01	Lake Konomoc	.....	.....	.....	.....
Stuttgart	45.5	45.5	45.5	Pataluma	84	43	51.3	2.96	Lebanon	62	17	4.62	1.62
Texarkana	50.8	50.8	50.8	Placerville (1)	80	35	60.4	2.00	Mansfield	48	—2	23.4	4.21
Winslow	42.0	42.0	42.0	Placerville (2)	62	34	53.2	2.96	Middletown	52	0	24.7	4.66
California	.....	.....	.....	Ogilby	84	43	61.5	0.31	New Hartford (1)	38	—2	18.2	3.64
Alcade	45.1	45.1	45.1	Ontario	80	35	60.4	2.00	New Hartford (2)	.....	.....	.....	.....
Alcatraz Island	47.4	47.4	47.4	Orland	73	30	47.4	2.46	South Manchester	44	—5	23.9	4.14
Almaden	50.4	50.4	50.4	Oroville	70	30	47.9	4.61	Thompson	46	2	22.7	3.38
Anahiem	60.2	60.2	60.2	Pajaro	76	38	54.0	3.54	Uncasville	.....	.....	.....	.....
Anderson	48.8	48.8	48.8	Paso Robles	70	26	56.2	3.42	Voluntown	50	2	26.8	5.03
Angel Island	47.7	47.7	47.7	Red Bluff	78	34	51.0	2.04	Wallingford	46	—3	22.4	5.21
Antioch	49.4	49.4	49.4	Redding	65	33	48.1	3.56	Waterbury	46	—3	22.4	5.21
Aptos	54.4	54.4	54.4	Riverside	78	34	54.0	3.07	West Simsbury	44	—3	23.9	4.14
Athlone	46.9	46.9	46.9	Rocklin	62	34	56.5	3.78	Delaware	.....	.....	.....	.....
Auburn	51.3	51.3	51.3	Rosemary	67	34	46.4	3.91	Dover	55	18	34.2	4.00
Bakersfield	48.0	48.0	48.0	Sacramento (1)	58	28	39.9	3.72	Kirkwood	55	20	30.4	....
Barstow	48.8	48.8	48.8	Sacramento (2)	60	38	45.4	2.64	Washington B'ks	58	19	35.5	2.70
Beaumont	48.8	48.8	48.8	San Joaquin	78	42	57.4	2.00	Florida	.....	.....	.....	.....
Belmont	48.4	48.4	48.4	Santa Barbara	68	36	52.8	0.00	Alvato	86	37	59.6	0.54
Benicia Barracks	43.6	43.6	43.6	Salinas (1)	72	35	51.0	2.04	Deale	79	19	54.0	0.39
Berendo	46.0	46.0	46.0	Salinas (2)	62	40	49.3	2.26	Eustis	84	28	56.4	1.57
Berkeley	3.33	3.33	3.33	Salton	80	40	58.2	0.32	Fort Barrancas	73	27	57.4	2.22
Bishop Creek	40.1	40.1	40.1	Sanger Junction	73	32	46.0	2.37	Fort Meade	82	25	59.4	1.75
Boca	3.65	3.65	3.65	San Ardo	78	32	46.4	1.41	Homeland	82	30	60.4	1.70
Borden	48.9	48.9	48.9	San Bruno	67	34	56.5	1.64	Hypoluxo	48	34	61.4	1.34
Boulder Creek	44.4	44.4	44.4	San Gabriel	84	44	58.1	1.68	Merritt's Island	78	42	61.2	3.15
Brentwood	4.95	4.95	4.95	San Jose	70	35	48.6	2.40	Orange City	83	33	55.9	0.46
Brighton	45.8	45.8	45.8	San Mateo	62	34	47.1	2.86	St. Francis B'ks	79	36	56.9	0.66
Caliente	45.3	45.3	45.3	Santa Ana	86	36	60.4	2.35	San Antonio	80	30	60.4	1.72
Calistoga	48.1	48.1	48.1	Santa Barbara (1)	76	44	58.4	2.81	Tallahassee	75	25	51.7	2.90
Castrovile	55.5	55.5	55.5	Santa Barbara (2)	69	38	55.3	3.02	Villa City	78	36	52.1	0.83
Centreville	3.05	3.05	3.05	Santa Clara	62	33	47.5	2.07	Georgia	.....	.....	.....	.....
Chico	45.5	45.5	45.5	Santa Cruz (1)	76	38	53.1	2.34	Athens (1)	70	26	45.3	2.60
Cisco	3.24	3.24	3.24	Santa Cruz (2)	68	34	51.5	2.78	Athens (2)	70	23	45.1	3.56
Colfax	48.3	48.3	48.3	Santa Rosa	62	31	46.6	3.93	Blakely	80	27	53.4	1.91
Colton	4.34	4.34	4.34	Santa Salona	80	45	54.0	1.01	Diamond	23	32	51.6	2.88
Corning	57.6	57.6	57.6	Santa Paula	80	45	54.6	2.40	Hypoluxo	48	34	61.1	3.15
Crescent City	47.7	47.7	47.7	Santa Paula	80	45	54.0	1.01	Meritt's Island	78	42	54.9	0.95
Davisville	48.9	48.9	48.9	Santa Paula	80	45	54.0	1.01	Orange City	83	32	55.9	0.46
Delano	47.9	47.9	47.9	Santa Rosa	62	31	46.6	3.93	Point Peter	70	24	47.1	4.05
Delta	48.4	48.4	48.4	Selma	61	34	44.2	1.89	Port McPherson	70	24	43.8	3.59
Dunigan	41.0	41.0	41.0	Seven Palms	82	43	59.9	0.50	Fort McPherson	70	24	42.3	2.25
Dunsmuir	45.5	45.5	45.5	Shingle Springs	70	33	49.0	5.40	Point Peter	70	22	40.5	3.57

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
Iowa—Cont'd.	0	0	0	Ina.	Kansas—Cont'd.	0	0	0	Ina.
Glenwood (1)	72	4	34.3	0.00	Weskan.	65	10	39.4	Dudley.
Greenfield	63	2	29.9	0.05	Winona.	67	0	0.00	Fall River (1) *.
Grinnell	54	0	29.2	T.	Yates Centre.	.....	1.17	.....	Fishkdale.
Hampton	52	—8	24.0	0.80	Kentucky.	.....	.....	.....	Fitchburg (1).
Humboldt	54	—15	26.1	1.00	Bowling Green †.	.....	4.45	.....	Fitchburg (2).
Independence	51	2	26.6	0.54	Burkeville.	.....	2.35	.....	Fort Warren.
Indianaola	64	—1	31.5d	0.36	Burnside †.	.....	4.72	.....	Framingham.
Iowa City	58	6	33.1	0.31	Caddo †.	58	17	36.0	Gilbertville.
Larrabee	.....	.....	.....	.....	Catlettsburgh †.	.....	3.96	.....	Groton (1).
Le Claire †.	.....	.....	.....	.....	Canton.	63	18	39.3	Heath.
Logan.	65	2	33.8	.....	Central City.	60	22	34.3	Kendall Green.
Manson.	58	8	25.9	0.75	Earlington.	70	21	41.7	Lake Cochituate.
Macquackenb.	53	5	27.7	0.52	Eddyville †.	.....	2.63	.....	Lawrence.
McCausland	51	9	28.5	0.24	Edmonton.	59d	18d	39.4d	Leicester.
Monticello	51	0	26.0	0.71	Falmouth (1) †.	.....	1.88	.....	Leominster.
Mount Pleasant †.	54	12	34.3	0.18	Frankfort (1) †.	.....	3.84	.....	Long Plain *.
Mount Vernon	57	5	28.6	0.45	Frankfort (2).	64	14	35.4	Lowell (1).
Mnscatinne (2).	59	5	29.1	1.20	Greensburg †.	68	21	40.8	Lowell (2).
Osage.	—7	22.5	0.75	.....	.....	.....	.....	Lowell (3).	
Oskaloosa (1) *	58	10	32.9	0.75	Harrodsburgh †.	59	14	36.3	Ludlow (1).
Panama.	65	1	26.6	0.07	Louisia †.	.....	3.94	.....	Ludlow (2).
Sac City.	56	4	25.0	0.45	Mount Sterling †.	57	14	35.9	Lynn.
Storm Lake.	55	—4	27.5	0.44	Newport Barracks.	55	13	33.0	Mansfield.
Vinton.	54	—4	27.0	0.89	Paducah †.	.....	0.66	.....	Medford.
Washington.	54	7	31.9	0.18	Pellville †.	58	18	37.2	Middleborough.
Webster City.	52	—14	25.0	0.50	Princeton †.	66	16	38.2	Milton *.
West Bend †.	51	—18	23.4	1.41	Richmond.	59	12	36.8	Monson.
Kansas.	.....	.....	.....	Shelbyville †.	58	12	35.0	Mount Nonotuck.	
Abilene.	69	6	.....	Williamsburgh.	.....	4.20	.....	Mystic Lake.	
Allison.	65	4	27.5	0.05	Louisiana.	.....	.....	.....	Mystic Station.
Alton.	73	7	35.6	T.	Abeville.	79	31	56.4	Nahant.
Altoona.	.....	.....	1.08	Amitié City.	80	24	52.8	New Bedford (1).	
Bucklin.	.....	.....	0.50	Baton Rouge.	80	25	55.3	New Bedford (3).	
Buffalo Park.	66	8	.....	Cameron.	82	25	56.0	Newburyport (1).	
Burr Oak.	70	5	.....	Clinton d.	79	30	54.9	Newburyport (2).	
Cawker City.	70	10	34.2	T.	Coushatta (1) †.	.....	1.99	Northampton.	
Collyer.	60	9	35.2	0.00	Crowley.	81	27	55.4	North Billerica.
Columbus.	.....	.....	1.55	.....	Delhi †.	72	23	47.8	Plymouth.
Cunningham.	70	7	34.9	1.79	Edgar.	81	27	55.5	Princeton.
Downs.	.....	.....	T.	Edgar.	81	32	55.5	Provincetown.	
Elco.	74	10	38.4	1.00	Emilie.	79	28	53.8	Randolph.
Elk Falls †.	70	8	42.5	0.44	Farmerville.	72	37	51.8	Roberts Dam.
Ellis (2).	70	12	.....	Grand Cane.	74	26	49.8	Royalston *.	
Emporia.	68	10	37.0	1.27	Grand Coteau.	79	27	56.5	Salem (2).
Englewood.	68	17	39.2	1.11	Homer.	73	30	49.8	Somerset *.
Eureka Ranch.	71	4	37.1	0.00	Houma.	82	27	54.6	South Hingham.
Ft. Leavenworth (1).	70	9	37.4	0.49	Jackson Barracks.	76	31	53.8	Springfield Arm'y.
Ft. Leavenworth (2).	65	10	34.8	0.40	Jeanerette.	81	27	53.8	Taunton (2).
Fort Riley.	66	5	36.8	0.12	Lake Charles.	80	27	56.2	Taunton (3).
Fremont.	73	4	37.5	T.	Liberty Hill.	78	21	53.0	Wakefield.
Globe.	65	8	32.0	1.00	Lulingd.	78	27	50.0	Wellesley.
Gove City †.	79	7	34.8	T.	Mandeville.	77	27	53.6	Westborough *.
Grainfield.	65	8	39.2	0.00	Marksville.	76	28	54.2	Winchester *.
Grenola.	68	2	38.7	0.90	Maureps.	72	23	53.0	Michigan.
Grinnell.	70	10	39.4	0.00	Melville †.	82	26	52.6	Adrian.
Halstead.	68	5	37.2	1.21	Minden.	75	24	54.0	Albion (1).
Havensville.	63	2	30.8	0.70	Monroe †.	72	25	50.5	Allegan.
Horton.	67	8	36.5	0.15	New Iberia.	81	29	56.9	Alma.
Hoxie.	78	10	39.9	0.00	Plaquemine.	82	24	51.2	Ann Arbor.
Hutchinson.	.....	.....	1.34	Sugar Ex. Station.	78	33	54.0	Arbela †.	
Independence.	66	6	38.6	1.44	Thibodeaux.	.....	3.55	.....	Atlantic.
Kansas City.	67	10	36.1	1.30	Winnsborough.	79	40	61.2	Bar Mountain.
Kellogg.	66	7	38.8	1.30	Maine.	.....	2.23	.....	Bangor.
Kingman.	.....	.....	1.25	Bar Harbor.	49	—9	18.3	Bear Lake.	
Kirwin.	.....	.....	0.00	Belfast.	35	—8	15.1	Bellaire.	
La Crosse.	69	9	37.4	T.	Calais.	53	—10	16.5	Bent Branch.
La Harpe.	68	16	34.3	1.20	Cornfield.	35	—7	14.6	Benton Harbor.
Lakin.	68	—3	32.9	0.05	Farmington.	42	—26	7.4	Bethel.
Lawrence.	67	15	36.0	1.00	Kennebec Arsenal.	41	—5	19.4	Birch Run.
Lebo.	70	7	36.8	0.92	Kent's Hill.	33	—20	7.0	Birmingham.
Lincoln.	66	10	.....	Lewiston.	35	—12	11.4	Branson.	
Macksville.	.....	.....	0.25	Orono †.	37	—16	11.9	Calumet.	
Manhattan (1) †.	72	3	33.2	0.18	Orono †.	47	—36	11.4	Cassopolis.
Manhattan (2) *	64	8	33.7	0.25	Petit Menan.	45	—5	21.5	Caldwell.
Manhattan (3) *	64	6	31.0	0.00	West Jonesport.	45	—6	21.5	Charlevoix.
Mankato.	71	6	37.2	1.30	Barren Creek Sp'gat.	57	18	36.4	Chebwygan.
Marmaton.	62	6	37.2	0.00	Cumberland (1).	56	11	31.8	Chelsea.
McAllaster.	70	5	39.9	0.10	Cumberland (2).	66	13	34.2	Clinton.
McPherson.	.....	.....	1.22	Fallston.	53	14	31.5	Colon.	
Minneapolis.	64	4	33.3	T.	Fort McHenry.	51	15	33.0	Concord.
Monument.	68	8	35.2	0.25	Frederick.	58	15	33.8	Crystal Falls.
Morse.	60	12	35.2	1.00	Gaithersburgh.	.....	29.0	.....	East Saginaw.
Oakley.	68	.....	0.00	McDonogh.	16	29.0	.....	Eden.	
Oberlin †.	70	10	33.1	T.	Mt. St. Mary's Col.	65	18	32.2	Evert.
Ogallah.	70	8	34.7	0.80	Woodstock.	53	—1	23.4	Fairview.
Owego.	65g	12g	41.7g	2.00	Massachusetts.	.....	.....	.....	Fitchburgh.
Page City.	62	6	31.9	0.00	Amherst.	46	—5	22.9	Flint.
Pauline.	69	13	37.4	1.00	.....	46	—2	23.2	Fort Brady.
Plainville.	62	7	34.8	0.00	Amherst Ex Sta. (1).	46	—5	21.7	Fort Mackinac.
Quinter.	62	7	37.1	0.00	Amherst Ex Sta. (2).	46	—6	21.7	Fort Wayne.
Kome.	67	11	38.9	0.80	Andover.	47	2	23.2	Fremont.
Salina.	61	9	35.2	T.	Blue Hill (sum't).	53	—1	23.4	Gaylord.
Scott City.	74	6	41.6	0.00	Blue Hill (base).	55	0	24.5	Gladwin.
Sedan.	67	10	40.5	1.22	Blue Hill (valley).	55	0	24.7	Grand Rapids.
Seneca.	68	1	32.8	0.02	Boston.	.....	.....	.....	Grape.
Sharon Springs.	68	.....	0.00	.....	.....	46	—5	21.0	Grayside.
Shields.	78	8	41.4	T.	.....	46	—6	21.7	Hart.
Spearville.	70	8	37.2	0.38	Brewster.	52	7	29.8	Hastings.
Springvale.	70	10	.....	Cambridge (1).	49	1	23.8	Grayling.	
Tribunet.	66	6	35.4	T.	Cambridge (2).	52	2	23.6	Gulliver Lake.
Wakefield.	64	9	37.1	0.05	Chestnut Hill.	54	1	25.4	Harbor Springs.
Wa Keeney.	70	14	.....	Clinton.	55	0	24.7	Harrison.	
Wallace (1).	.....	.....	0.00	Concord.	50	—2	21.6	Harrisville.	
Wallace (2).	70	12	0.00	.....	47	5	27.7	Hart.	
Wellington.	70	10	39.0	0.79	Concord.	56	—9	21.1	Hastings.

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
Michigan—Cont'd.	0	0	0	Ina.	Massachusetts—Con.	0	0	0	Ina.
Hayes.	49	7	26.7	1.46	Dudley.	49	—2	22.4	3.34
Highland Station.	45	1	21.7	1.06	Fall River (1) *	54	6	28.0	4.67
Hillman.	49	—17	23.9	0.68	Fitchburg (2).	45	—6	20.3	2.40
Hillsdale.	45	4	26.2	0.81	Fort Warren.	41	5	25.0	2.44
Holt.	.....	.....	.....	Framingham.	50	—1	24.1	2.71	
Howell.	47	3	24.5	1.58	Gilbertville.	43	—6	22.3	3.75
Ionia.	48	5	27.7	1.58	Groton (1).	48	—2	22.0	3.28
Ivan.	45	1	23.4	1.34	Kendall Green.	53	—2	23.8	5.55
Jackson.	48	10	29.2	1.35	Lake Cochituate.	53	—2	23.8	5.26
Jeddo.	44	12	26.2	0.78	Lawrence.	47	—1	22.7	3.00
Kalamazoo.	50	13	29.1	1.35	Leicester.	49	—2	21.3	3.12
Lansing.	47	—9	27.2	1.32	Leominster.	49	—2	21.3	3.12
Lathrop.	42	5	26.4	1.20	Long Plain *.	48	—1	25	

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean.			Max.	Min.	Mean.	
Missouri—Cont'd.	0	0	0	Ins.	Nebraska—Cont'd.	0	0	0	Ins.
Austin	68	13	37.4	0.75	Plattsmouth	71	2	32.9	0.00
Bonville	64	12	35.6	0.31	Havenna	70	10	33.0	0.04
Brunswick	64	10	35.0	0.70	Sargent	70	10	33.0	0.00
California	61	10	34.4	1.57	Seward	58	18	37.5	0.17
Carrollton	64	3	39.0	1.15	Superior	67	8	33.1	0.22
Carthage	66	3	38.0	1.98	Syracuse	60	26	33.4	0.25
Cassville	66	—3	38.0	1.67	Tecumseh	68	2	33.0	0.00
Centreville	—	—	—	—	Tekamah	68	9	32.5	—
Conception	64	6	34.5	—	Wallace	70	9	31.0	T.
Dadeville	68	20	42.0	1.82	Weeping Water	72	1	31.0	—
Eldon	66	18	38.2	0.63	West Hill	65	0	30.0	0.00
Excelsior Springs	64	6	31.4	1.15	West Point	55	—6	30.0	0.10
Fayette	64	2	35.0	0.40	Whitman	64	8	30.7	—
Fortescue	70	2	34.5	0.31	Wilcox	—	—	—	0.10
Glasgow	63	9	36.0	0.95	Nevada	—	—	—	—
Gordonville	68	12	38.4	1.77	Austin	54	12	33.5	1.10
Grand Pass	60	9	31.9	1.10	Battle Mountain	53	13	34.4	0.30
Hannibal	60	14	—	0.12	Belmont	54	10	31.6	1.58
Harrisonville	61	13	35.1	0.53	Beowawa (1)	58	10	30.9	0.30
Hermann	55	12	36.0	0.64	Browns	58	21	39.2	0.31
Jefferson Barracks	65	8	37.7	0.90	Candelaria	55	18	35.7	0.23
Jefferson City	63	13	38.6	0.54	Carlton	48	0	23.6	0.60
Jerome	—	—	—	1.10	Carson City	64	12	33.2	2.31
Kansas City	67	13	36.8	0.40	Columbus Marsh	56	3	28.0	0.50
Lamotte	65	11	35.4	0.50	Crane's Ranch	—	—	—	0.84
Lebanon	76	24	43.1	2.65	Downeyville	63	17	38.2	0.36
Liberty	64	9	34.6	1.81	Eldorado Canyon	73	42	56.2	0.81
Louisiana Bridge	—	—	—	0.20	Elko (1)	56	8	30.7	0.00
Marshall (1)	65d	6d	35.4	0.80	Ely	61	1	25.6	0.61
New Haven	62	14	34.6	0.70	Eureka	64	23	47.4	0.16
Oak Ridge	65d	18	42.1	0.70	Fenelon	63	11	31.6	0.18
Oregon	70	6	35.5	0.32	Genoa	60	14	31.7	—
Pickering	54	—1	27.8	T.	Golconda	58	12	33.2	0.48
Platte River	60	8	35.6	2.25	Halleck	52	1	27.0	0.63
Princeton	65	8	34.4	1.05	Hawthorne (1)	53	24	38.5	0.40
Saint Charles (1)	—	—	—	0.90	Hawthorne (2)	64	21	38.6	0.40
Saint Charles (2)	60	12	37.1	1.54	Hot Springs (1)	56	11	30.7	1.00
Saint Joseph	—	—	—	0.03	Humboldt (1)*	60	12	32.0	0.50
Saint Louis	62	2	34.6	1.18	Lewer's Ranch	62	13	34.7	3.55
Sarcocie	65	—2	39.0	1.30	Mill City	58	10	38.8	0.99
Sedalia	60	11	37.4	1.72	Palisade	62	10	31.5	0.90
Shelbyville	—	—	—	1.70	Palmetto	62	9	33.4	0.75
Steelville	64	—2	35.5	1.35	Pioche	57	0	29.7	0.82
Stellada	63	10	37.8	0.20	Reno	52	14	34.3	—
Warrensburg	62	19	36.5	1.33	Reno State Univ'ty	62	12	32.9	1.69
Warrenton	66	16	33.8	0.66	Tecona	45	8	23.9	0.15
Willow Springs	61	8	37.1	1.72	Verdi	58	4	29.6	0.33
Wither's Mills	66	16	36.8	1.00	Virginia City	58	18	37.7	3.07
Montana	—	—	—	—	Wadsworth	60	18	35.4	0.61
Camp Poplar River	57	—4	26.4	0.09	Wells	65	4	33.0	0.16
Choteau	61	2	35.1	1.10	Winнемucca	49	14	27.1	1.05
Custer	—	—	—	0.43	Yount's Ranch	66	28	47.3	0.69
Fort Assiniboine	56	—12	30.4	0.25	New Hampshire	—	—	—	—
Fort Custer	58	—7	31.2	0.35	Antrim	—8	—	3.53	—
Fort Keogh	64	—19	22.6	0.50	Belmont	—	—	4.41	—
Fort Missoula	51	7	31.0	0.61	Berlin Falls	40	—31	6.7	—
Fort Shaw	58	0	36.2	0.47	Berlin Mills	40	—30	9.0	4.40
Glendive	60	—1	29.4	0.30	Concord	39	—11	17.0	3.83
Martinsdale	49	9	32.4	1.60	East Canterbury	37	—11	15.4	3.42
Powder River	57	—15	24.6	1.00	Hanover (1)	35	—20	12.4	4.66
Virginia City	46	5	29.4	0.70	Hanover (2)	44	—26	11.8	2.80
Nebraska	—	—	—	—	Lake Village	—	—	4.97	—
Alliance	67	—3	31.6	0.15	Littleton	38	—22	10.6	2.88
Ansley	74	—4	32.5	T.	Manchester (1)	42	—10	19.3	3.37
Ashland	69	4	—	0.50	Mine Falls	—	—	4.55	—
Bassett	70	—5	31.7	T.	Nashua	48	—2	21.3	5.03
Beaver City	82	2	34.2	0.25	Newton	48	—2	19.4	4.23
Burwell	64	0	28.1	0.02	North Conway	41	—16	12.1	5.98
Crawford	50	16	29.1	0.00	North Sutton	—7	13.9	3.10	4.68
Creighton	59	—2	26.8	0.00	Pennichuck Station	—	—	3.97	—
Crete	74	5	31.6	0.30	Plymouth	39	—16	12.0	3.94
Culbertson (1)	—	—	—	0.00	Stratford	36	—25	8.6	2.90
David City	64	2	24.6	T.	Walpole	42	—15	15.0	3.91
De Soto	65	4	31.6	0.13	West Milan	40	—32	8.8	3.76
Dunning	62	0	32.6	T.	Wier's Bridge	—	—	4.87	—
Ericson	70	5	30.6	T.	Wolfsborough	—	—	3.92	—
Fairborn	57	—	—	—	New Jersey	—	—	—	—
Fairfield	70	4	30.2	0.28	Allaire	54	9	31.4	—
Fort Niobrara	70	—10	29.0	0.15	Astbury Park	52	14	31.0	2.72
Fort Omaha	71	10	34.6	0.06	Bellefonte	—	—	4.37	—
Fort Robinson	68	5	33.1	0.01	Beverly	53	8	29.7	3.40
Fort Sidney	65	5m	31.0	0.17	Billingsport L. H.	48	17	31.2	—
Franklin	67	4	32.4	0.81	Bridgeton	56	22	35.4	5.26
Fremont	70	5	32.3	0.08	Cape May C. H. f.	55	16	34.3	4.43
Geneva	—	—	—	0.50	Egg Harbor City	56	14	32.5	5.22
Gering	65	3	30.7	0.00	Freehold	54	11	30.4	5.13
Grand Island	65	8	36.1	0.27	Gillette	47	10	27.8	3.39
Grant	—	—	—	0.20	Highland Park	50	5	27.4	4.32
Hastings	66	4	—	0.25	Imlaystown	54	13	30.1	4.44
Hay Springs	62	7	28.5	0.35	Junction	—	—	3.07	—
Hebron	64	7	33.8	0.00	Lockertown	51	12	30.0	2.34
Holdrege	—2	—2	—	0.00	Madison	49	5	28.6	2.66
Howe	65	5	34.8	0.00	Moorestown	50	5	27.4	4.32
Imperial	60	8	32.5	0.00	Mount Newark	51	14	30.3	2.99
Kimball	67	6	34.7	0.53	Newark (1)	48	13	30.0	3.71
Lexington	68	—2	34.4	T.	Newark (2)	—	—	4.35	—
Lincoln	71	5	33.0	0.00	New Brunswick (1)	50	7	27.8	4.21
Marquette (1)	68	4	—	—	New Brunswick (2)	50	9	29.4	3.85
Minden	66	4	31.1	0.00	New Brunswick (3)	51	11	29.2	—
Nebraska City	70	7	33.6	0.00	Ocean City	48	18	33.0	4.00
North Loup	61	—2	31.1	0.00	Oceanic	53	16	34.1	5.74
Oakdale	68	0	—7.2	0.01	Ramcoas	—	—	3.29	—
O'Neill	80	9	32.2	0.00	Readington	50	16	33.6	—
Palmer	64	—2	29.1	0.00	Tenafly	49	3	27.7	3.38

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean.			Max.	Min.	Mean.	
New Jersey—Cont'd.	0	0	0	Ins.	New Jersey—Cont'd.	0	0	0	Ins.
Woodbury	52	18	33.0	3.71	Woodbury	52	18	33.0	3.01
New Mexico	—	—	—	—	Watervile Arsenal	—	—	—	2.20
Albert	67	17	44.8	0.74	Wedgewood	43	—	35.8	3.84
Antelope Springs	60	11	35.8	2.00	West Point	40	0	17.6	1.15
Bernalillo	62	—2	30.9	0.50	White Plains	47	10	29.7	2.76
Chama	53	13	30.6	—	Willets Point	49	10	30.5	3.44
Cuba	—	—	—	—	North Carolina	—	—	—	—
Emtudo	—	—	—	—	Asheville	69	16	39.3	2.44
Estalina Springs	—	—	—	—	Bryson City	—	—	—	4.25
Fort Bayard	77	21	43.2	1.07	Chapel Hill	71	20	40.8	3.35
Fort Marcy	55	10	31.8	1.54	Currituck Inlet	—	—	—	3.58
Fort Stanton	62	12	38.0	1.58	Douglas	67	18	37.6	2.20
Fort Union	62	5	32.6	0.14	Franklin	66	10	38.2	2.50

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
Oklahoma Territory.	0	0	0	Ins.	Pennsylvania—Con.	0	0	0	Ins.
Fort Reno.	76	6	42.4	0.14	Pottstown.	53	12	29.7	2.56
Fort Sill.	72	15	44.9	0.63	Quakertown.	52	5	27.1	3.21
Guthrie.	70	8	42.8	1.23	Reading.	.....	.....	2.47	.....
Oregon.	.....	.....	.....	.....	Ridgway.	.....	.....	2.28	.....
Albany.	56	27	43.2	4.92	Riversburgh.	46	0	25.9	.....
Ashland (1).	53	21	37.5	2.85	Salem Corners.	40	12	25.8	5.45
Ashland (2).	58	20	39.6	1.98	Saltzburg.	.....	.....	5.91	.....
Bandon.	60	28	50.6	7.62	Swishtownville.	.....	.....	2.98	.....
Beulah.	51	6	28.4	0.92	Selin's Grove.	47	6	28.2	4.38
Burns.	0	25.8	5.6	.....	Smith's Corners.	44	7	24.5	.....
Cascade Locks.	55	41	.....	7.57	Somersett.	50	1	26.8	2.52
Corvallis.	57	25	42.4	3.80	South Eaton.	47	3	25.6	3.31
Deer Island.	.....	.....	7.27	.....	State College.	48	1	25.4	.....
East Portland.	56	27	.....	1.33	Stayestown.	.....	.....	3.19	.....
Eola.	53	29	41.2	4.33	Swarthmore.	.....	.....	3.30	.....
Eugene.	60	28	44.2	2.76	Troy.	51	15	30.7	2.49
Forest Grove.	57	28	40.6	4.81	Uniontown.	50	13	25.2	5.00
Gardiner.	61	34	47.2	6.64	Warren.	53	9	33.1	6.84
Gold Beach.	64	35	49.0	4.67	Wellsborough.	45	10	22.2	2.20
Grant's Pass.	67	24	39.1	2.96	West Chester.	51	14	30.0	4.97
Hardman.	52	22	38.7	0.87	Westtown.	50	13	30.8	3.30
Heppner.	66	24	42.0	1.42	Wilkes Barre.	48	9	23.5	3.95
Hood River.	60	27	40.6	3.09	York.	43	6	23.7	3.48
Hubbard.	58	24	41.3	4.35	Jacksonville.	53	21	39.4	2.52
Huntington.	57	16	35.5	1.00	Rhode Island.	.....	.....	2.27	.....
Joseph.	52	16	29.8	1.17	Bristol.	50	5	28.2	4.95
La Grande.	55	18	39.6	0.90	Fort Adams.	55	4	26.8	3.61
Lakeview.	57	16	35.5	1.00	Kingston (1).	51	1	27.4	5.51
Lone Rock.	56	22	39.4	1.14	Lonsdale.	52	3	26.8	6.16
McMinnville.	56	26	41.6	4.66	Olneyville.	54	6	30.0	5.25
Mount Angel.	57	27	42.0	3.72	Pawtucket.	.....	.....	3.00	.....
Pendleton.	63	21	40.5	1.46	Providence (1).	52	6	28.0	5.06
Silver Lake.	65	6	32.6	T.	Providence (2).	51	2	26.3	4.33
Siskiyou.	55	30	39.9	1.38	South Carolina.	.....	.....	.....	.....
Telocast.	.....	.....	0.70	.....	Aiken.	70	27	48.4	1.01
The Dalles.	61	25	37.2	1.19	Belmont.	67	22	44.6	2.09
Tillamook R'k L.H.	.....	.....	8.43	.....	Brewer Mine.	68	27	44.5	3.93
Toledo.	64	32	47.4	2.65	Conway.	68	19	43.7	1.96
Vernonia.	54	32	42.1	8.59	Evergreen.	68	24	.....	1.07
Pennsylvania.	.....	.....	4.98	.....	Greenville.	68	20	.....	3.95
Allegheny Arsenal.	10	.....	34.5	3.80	Jacksonborough.	75	23	48.2	1.09
Altoona.	56	14	29.9	2.25	Kirkwood.	59	25	40.4	2.02
Aqueduct.	55	10	29.9	2.25	McCormick.	.....	.....	1.99	.....
Blooming Grove.	45	0	24.1	4.10	Port Royal.	73	34	51.6	2.05
Blue Knob*.	44	6	23.4	8.63	Simpsonville.	68	22	44.0	3.11
Brookville.	.....	.....	3.30	.....	Spartanburgh (1).	76	14	42.6	3.39
Browers Lock.	.....	.....	2.37	.....	Spartanburgh (2).	68	24	45.6	1.20
Carlisle.	56	8	28.6	4.20	Statesburg.	69	26	46.3	1.81
Catawissa.	45	10	28.5	4.10	Trial.	72	28	.....	1.31
Chambersburgh.	58	5	27.6	2.38	Charlesville.	59	5	3.83	1.18
Clarion (1).	59	5	27.4	3.83	Coatesville.	53	7	28.3	3.51
Confluence.	.....	.....	4.06	.....	Concord.	53	11	28.2	3.70
Coopersburgh.	53	11	28.2	3.36	Coope.	53	11	28.2	3.36
Corry.	44	4	25.1	3.36	Dickinson.	51	5	22.8	0.20
Davis Island Dam.	.....	.....	3.83	.....	Doylestown.	52	14	30.0	0.20
Doylestown.	.....	.....	3.38	.....	Flemington.	50	12	29.7	0.20
Du Bois.	51	11	20.6	3.36	Forreston.	51	9	27.2	0.05
Dyberry.	43	11	25.9	2.44	Glencairn.	52	11	27.7	0.05
Eagle's Mere.	38	4	22.1	7.02	Glens Falls.	53	11	27.7	0.05
Easton.	10	.....	3.38	.....	Goodwin.	54	11	27.7	0.05
Edinborough.	37	9	24.8	2.31	Greensburg.	50	11	27.7	0.05
Emporium.	48	7	27.4	3.21	Greenville.	50	11	27.7	0.05
F'ks of Neshaminy.	51	30.4	31.6	1.70	Hamburg.	50	11	27.7	0.05
Frankford Arsenal.	52	11	27.5	2.44	Hollidaysburgh.	57	2	25.4	2.71
Frederick.	.....	.....	5.28	.....	Honesdale.	54	11	27.7	0.05
Freeport.	.....	.....	2.51	.....	Hornbecker.	55	11	27.7	0.05
Germantown (1).	46	18	30.3	2.41	Huntingdon.	52	11	27.7	0.05
Germantown (2).	.....	.....	3.38	.....	Ivanhoe.	53	11	27.7	0.05
Girardville.	46	10	27.5	4.05	Jessup.	54	11	27.7	0.05
Grampian Hills.	44	0	24.0	4.15	Johnstown.	51	7	25.1	2.35
Greensburg.	50	1	26.6	2.03	Kingsport.	55	7	25.1	2.35
Greenville.	50	1	26.6	2.08	Lebanon.	56	3	24.4	2.35
Hamburg.	.....	.....	2.21	.....	Ligonier.	57	7	25.1	2.35
Hollidaysburgh.	57	2	28.4	5.71	Longwood.	58	7	25.1	2.35
Honesdale.	45	9	22.1	4.01	Lycoming.	59	7	25.1	2.35
Huntingdon.	52	5	28.9	3.35	Meadow.	55	7	25.1	2.35
Indiana.	47	7	27.4	6.51	Monroe.	56	7	25.1	2.35
Johnstown.	51	7	29.9	4.89	Northampton.	57	7	25.1	2.35
Kennett Square.	.....	29.1	3.37	Oil Creek.	58	7	25.1	2.35	
Kilmer.	53	10	31.0	3.06	Orwigsburg.	59	7	25.1	2.35
Lancaster.	50	9	31.4	1.08	Penns.	55	7	25.1	2.35
Lansdale.	.....	.....	2.37	Perkinsburg.	56	7	25.1	2.35	
Le Roy.	40	6	22.4	5.78	Philipsburg.	57	7	25.1	2.35
Lewisburgh.	48	27.8	2.99	Plumerton.	58	7	25.1	2.35	
Ligonier d.	52	4	29.9	3.69	Pocono.	59	7	25.1	2.35
Lock Haven.	50	0	26.6	4.43	Port Jervis.	55	7	25.1	2.35
Lock No. 4.	.....	.....	5.83	Port Jervis.	56	7	25.1	2.35	
Mahoning.	48	4	27.1	3.18	Port Jervis.	57	7	25.1	2.35
Mauch Chunk.	58	6	29.4	3.30	Port Jervis.	58	7	25.1	2.35
McConnellsburgh.	58	8	26.5	3.10	Port Jervis.	59	7	25.1	2.35
Meadville (2).	43	8	28.2	3.98	Port Jervis.	60	7	25.1	2.35
Myerstown.	52	1	28.2	3.98	Port Jervis.	61	7	25.1	2.35
New Castle.	45	2	29.8	2.13	Port Jervis.	62	7	25.1	2.35
Nisbet.	3	26.2	4.25	Port Jervis.	63	7	25.1	2.35	
Oil City.	.....	.....	1.96	Port Jervis.	64	7	25.1	2.35	
Ottsville.	.....	.....	2.37	Port Jervis.	65	7	25.1	2.35	
Parker's Landing.	.....	.....	3.91	Port Jervis.	66	7	25.1	2.35	
Pittsburgh.	58	4	29.0	3.91	Port Jervis.	67	7	25.1	2.35
Philadelphia.	.....	.....	3.21	Port Jervis.	68	7	25.1	2.35	
Philipburgh.	50	8	24.6	4.17	Port Jervis.	69	7	25.1	2.35
Phoenixville.	54	10	30.8	2.69	Port Jervis.	70	7	25.1	2.35
Point Pleasant.	.....	.....	3.20	Port Jervis.	71	7	25.1	2.35	

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
Pennsylvania—Con.	0	0	0	Ins.	Tennessee—Cont'd.	0	0	0	Ins.
Pottstown.	53	12	29.7	2.56	Parksville.	65	22	42.7	3.11
Quakertown.	52	5	27.1	3.21	Ridgleton.	69	18	40.2	5.46
Reading.	.....	.....	2.47	.....	Rockwood.	.....	.....	4.47	.....
Ridgway.	.....	.....	2.28	.....	Rogersville.	53	19	36.7	5.38
Riversburgh.	46	0	25.9	.....	Ruby.	60	14	38.4	4.93
Salem Corners.	40	12	25.8	5.45	Savannah.	72	20	42.5	5.37
Saltzburg.	.....	.....	5.91	.....	Sharps.	68	18	44.8	3.68
Selins Grove.	47	6	28.2	2.48	Springdale.	60	17	39.5	5.72
Smith's Corners.	44	7	24.5	2.48	Strawberry Plains.	.....	.....	4.35	.....
Somersett.	50	1	26.8	2.52	Trenton.	66	20	40.8	5.99
South Eaton.	47	3	25.6	2.52	Union City.	68	22	41.3	4.45
State College.	48	1	25.4	.....	Waynesborough.	65	20	42.2	2.50
Stoyestown.	.....	.....	3.19	.....	Texas.	.....	.....	.....	.....
Swarthmore.	.....	.....	3.30	.....	Austin (1).	83	27	54.7	0.85
Troy.	51	15	30.7	2.49	Austin (2).	84	29	54.8	.....
Uniontown.	50	13	25.2	5.00	Baylor.	60	14	38.4	4.93
Warren.	53	9	33.1	6.84	Bethany.	79	22	48.7	1.7

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
Mexico—Cont'd.	o	o	o	In.	Newfoundland.	o	o	o	Ins.
Mexico	68	36	52.0	o.26	Saint John's	49	9	27.5	5.81
Pueblo	76	34	55.8	T.	Dutch Guiana.				
Topolobampo*	79	67	71.8	o.61	Burnside-Coronie.	94	69	78.4	7.94
Zacatecas	73	28	49.6	1.44	West Indies.				
New Brunswick.					Hamilton, Ber.	77	53	65.1	4.13
Saint John.....	47	—11	16.4	6.38	Havana	86	56	73.9	0.90

Received too late for general discussion of weather for December, 1890.

Alabama.					Colorado—Cont'd.				
Selma(3)†				3.04	Morgan (near)	65	6	24.7	....
Arizona.					Pagoda (near)	56	—1	28.0	0.03
Signal†	71	35	53.9	1.08	Sedgewick	48	—15	24.3	1.90
California.					Parachute				0.39
Crescent City L. H.					Red Cliff				0.46
East Brother L. H.					Ricot				0.84
Farrallon L. H.					River Bend	66	14	35.7	....
Humboldt L. H.					Saint Cloud				0.10
Pt. Año Nuevo L. H.					Sanborn				0.00
Point Arena L. H.					Sheridan Lake				0.05
Point Boneta L. H.					Stamford				0.04
Pt. Concepcion L. H.					T. S. Ranch	53	14	32.5	T.
Point Montara L. H.					Thon	71	9	34.4	T.
Point Reyes L. H.					Upper Pine				T.
Presidio of San F.	75	32	50.4	4.75	Villas				0.60
Yerba Buena L. H.					Villa Grove				0.19
Colorado.					Watervale				0.40
Abbott					Watkins	49	17	26.6	....
Agnes	63	29	41.0	....	Westcliffe	57	—7	26.3	0.05
Alford†					Wray				T.
Alina	46	—2	24.2	....	Yuma				T.
Arroyo									
Bennet	87	24	44.4	....				
Box Elder									
Breckenridge	72	—21	26.9	0.85					
Brush									
Byers	62	10	33.0	....				
Cañon City	66	11	42.6	0.03					
Climax	42	—4	22.0	0.85					
Como (near)	43	0	22.0	0.02					
Cumbres	47	—12	21.2	5.40					
Deer Trail	66	10	35.0	....				
Delta	50	14	34.2	0.76					
Dillon				1.38					
Eagle Farm									
Elkhorn									
Emma									
First View	66	20	31.0	0.10					
Greenhorn	63	9	40.0	0.04					
Hugo	60	11	33.7	....				
Idaho Springs	58	7	33.7	0.22					
Julesburgh	72	4	34.8	....				
Kirk									
Kit Carson	70	24	50.0	0.25					
Las Animas	78	8	37.6	....				
Lay									
Leadville	53	3	24.1	0.38					
Le Roy	63	13	31.4	0.01					
Livermore									
Longmont	69	12	37.0	....				
Minneapolis									
Monte Vista	46	—6	23.3	0.11					
Moraine	55	1	33.0	0.35					

Received too late for publication in November, 1890.

Arizona.					Mississippi.				
San Simon	91	35	58.0	0.50	Palo Alto	86	31	59.6	0.03
Wood Cañon				4.00	Summit				0.57
Arkansas.					Missouri.				
Mount Nebo	75	32	54.3	3.27	Columbia	78	23	47.0	1.87
California.					Saint Louis	77	23	46.2	....
Bishop Creek	82	33	55.0	0.00	Martinsdale	66	5	38.0	0.80
Boca	70	8	43.8	0.00	Reno State Univ'ty.	68	18	36.5	0.00
Felton	90	26	54.7	0.12	New Mexico.				
Indio	98	40	68.5	0.00	Bernalillo				
Jolon					Monterey (Hotel del Monte)	64	—3	31.9	1.76
Merced					Dutch Guiana.				
Monterey (Hotel del Monte)	79	37	55.4	0.00	South Carolina.				
Mount Hamilton	77	30	55.5	0.58	Aiken	78	33	59.5	0.50
Mullans	77	32	51.0	....	South Dakota.				
Santa Rosa	75	33	53.7	0.00	Brookings	68	0	29.4	0.30
Swisn City	82	38	55.9	0.00	Texas.				
Truckee(1)	68	16	37.0	0.00	Edinburgh				
Walnut Creek	77	35	55.7	T.	Virginia.				
Georgia.					Bedford City*	62	32	49.1	0.55
Lithia Springs	78	37	59.4	0.02	Wisconsin.				
Idaho.					Beloit	56	20	38.6	2.16
Lewiston	62	21	37.7	0.05	Wyoming.				
Kootenai	61	19	34.1	0.56	Saratoga	60	0	26.5	1.00
Indiana.					Dutch Guiana.				
Evansville					West Indies.				
Iowa.					Havana	86	68	79.0	1.18
Muscatine(2)	66	22	40.8	1.38					

Letters of the alphabet denote the number of days missing from the record, thus: a indicates three days missing, etc., etc.

*Extremes of temperature from observed readings. †Signal Service instruments.

‡One observation daily at 10 a. m. §For 15 days.

Mean temperature (degrees Fahr.) observed at Charleston, S. C., by Drs. Linning, Chalmers, Dawson, and Johnson, John Ryan, U. S. Army surgeons (Fort Moultrie), and Signal Service observers.

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
1738	56.5	54.0	69.0	70.0	74.5	82.0	81.0	78.5	73.5	62.0	54.0	51.5	66.4
1739	49.0	52.0	62.0	69.5	75.0	77.5	78.5	79.5	99.5	64.0	54.0	56.0	65.2
1740	46.0	54.5	68.5	74.0	78.5	81.0	80.0	79.0	75.0	59.5	53.0	44.5	64.3
1742	52.0	48.5	56.5	72.0	74.5	77.5	82.5	81.0	72.5	62.0	49.5	52.5	65.1
1750	[49.9]	57.0	63.0	65.0	73.0	83.0	85.0	80.0	79.0	70.5	64.0	55.0	66.5
1751	47.0	54.0	64.0	67.0	74.0	79.0	82.0	83.0	75.0	65.0	53.0	55.0	67.8
1752	44.0	58.0	64.0	69.0	74.0	76.0	82.0	81.0	78.0	69.0	65.0	53.0	67.3
1753	53.0	57.0	60.0	65.0	74.0	79.0	82.0	81.0	75.0	66.0	54.0	56.0	66.8
1754	56.0	57.0	65.0	64.0	77.0	81.0	80.0	79.0	75.0	70.0	56.0	56.0	67.8
1755	51.0	48.0	56.0	63.0	71.0	78.0	79.0	77.0	74.0	63.0	54.0	49.0	63.6
1756	55.0	60.0	62.0	63.0	73.0	76.0	84.0	78.0	76.0	66.0	59.0	52.0	67.0
1757	47.0	52.0	61.0	65.0	73.0	77.0	78.0	79.0	75.0	67.0	61.0	55.0	65.7
1758	54.0	51.0	51.0	62.0	73.0	76.0	80.0	81.0	78.0	73.0	69.0	64.3	71.1
1759	44.0	49.0	53.0	61.0	71.0	73.0	78.0	77.0	75.0	66.0	57.0	51.0	65.6
1760	51.0	58.0	64.0	67.0	77.0	82.0	84.0	83.0	80.0	75.0	67.0	60.0	65.2
1761	50.0	52.0	59.0	66.0	74.0	78.0	82.0	83.0	78.0	73.0	67.0	60.0	66.2
1762	51.0	54.0	59.0	64.0	74.0	78.0	82.0	83.0	78.0	73.0	67.0	60.0	66.0
1763	52.0	57.0	62.0	69.0	77.0	81.0	85.0	86.0	81.0	76.0	70.0	65.0	66.0
1764	53.0	58.0	63.0	68.0	77.0	82.0	86.0	87.0	82.0	77.0	71.0	65.0	66.0
1765	54.0	59.0	63.0	68.0	77.0	82.0	86.0	87.0	82.0	77.0	71.0	65.0	66.0
1766	55.0	57.0	62.0	69.0	77.0	82.0	86.0	87.0	82.0	77.0	71.0	65.0	66.0
1767	56.0	58.0	63.0	68.0	77.0	82.0	86.0	87.0	82.0	77.0	71.0	65.0	66.0
1768	57.0	59.0	64.0	69.0	77.0	82.0	86.0	87.0	82.0	77.0	71.0	65.0	66.0
1769	58.0	60.0	65.0	70.0	77.0	82.0	86.0	87.0	82.0	77.0	71.0	65.0	66.0
1770	59.0	61.0	66.0	71.0	77.								

Table of miscellaneous meteorological data for December, 1890—Signal Service observations.

Stations and districts.	Elevation above sea-level, feet.	Pressure, in inches.			Temperature of air, in degrees Fahrenheit.						Mean relative humidity, per cent.	Precipitation, in inches.	Wind.			Precipit'n data since opening of station.				
		Mean actual.	Mean reduced.	Monthly range.	Monthly mean.	Departure from normal.	Maximum.	Mean maximum.	Minimum.	Mean minimum.			Direction.	Miles per hour.	Cloudless days.	Partly cloudy days.	Cloudy days.	Days with rainfall.		
													Date.	8 a.m.	Average cloudiness, tenths.	8 p.m.	Length of record, years.	Greatest for month.	Year.	
New England.																				
Eastport.	53	29.86	29.92	1.49	17.6	-8.3	52	26.2	10	9.1	33	6	9.069.5	2.62	1.66	10.971	nw.	54	se.	
Portland.	99	29.88	29.99	1.39	17.2	-11.8	41	25.1	4	9.4	36	5	9.795.4	5.08	+ 1.64	6.547	nw.	36	nw.	
Manchester.	247	29.75	30.03	1.24	19.9	-2.2	44	28.3	5	10.1	36	5	10.774.0	3.30	.....	5.109	nw.	35	nw.	
Northfield.	872	29.05	30.08	1.18	8.9	-	41	18.0	22	0.2	42	4	2.973.8	1.91	.....	6.904	sw.	48	sw.	
Boston f.	125	29.88	30.02	1.23	26.0	-6.0	56	34.2	0	17.8	40	8	18.075.0	4.76	+ 1.45	11.148	nw.	54	ne.	
Nantucket.	14	30.00	30.01	1.21	31.1	-	52	38.1	11	24.1	31	4	27.383.4	2.70	.....	11.166	nw.	48	se.	
Wood's Hole.	22	.....	.....	.....	29.2	-	54	37.3	6	21.2	19.5	5	3.390	+ 0.59	16.082	nw.	60	nw.	19	
Vineyard Haven.	.....	.....	.....	.....	31.9	-	56	42.0	11	21.8	36	7	2.54	.....	.....	.....	.....	.....	.....
Block Island.	27	30.01	30.04	1.14	31.4	-4.6	54	38.4	10	24.3	39	7	23.170.9	2.57	.....	10.899	nw.	82	no.	
Narragansett Pier.	22	.....	.....	.....	29.0	-	40	55	38.9	4	18.3	48	10	5.09	+ 1.10	.....	.....	.....	.....	.....
New Haven.	107	29.93	30.05	1.15	26.6	-5.4	51	33.9	5	19.4	39	4	17.673.4	2.90	-	0.78	7.388	ne.	52	ne.
New London.	47	29.98	30.03	1.10	29.4	-3.6	52	36.4	8	22.5	42	4	17.763.8	3.93	-	0.34	7.187	nw.	36	nw.
Mid-Atlantic States.																				
Albany.	85	29.92	30.09	1.22	19.8	-9.2	46	26.9	2	12.8	31	2	14.078.0	2.94	-	0.99	5.934	nw.	30	nw.
New York City.	185	29.86	30.07	1.09	31.4	-3.6	54	38.4	13	24.3	37	8	20.971.6	5.43	+ 2.12	11.231	uw.	48	ne.	
Harrisburg.	377	29.68	31.01	1.08	29.4	-	55	35.3	14	23.6	23	4	22.877.0	2.42	.....	6.981	sw.	64	ne.	
Philadelphia.	117	29.97	30.10	1.20	32.2	-3.8	52	38.3	17	20.6	20	5	21.509.2	2.33	-	0.48	9.670	ne.	48	ne.
Atlantic City.	53	30.03	30.08	1.19	33.6	-2.4	54	39.8	17	27.3	29	6	28.080.1	3.33	-	0.78	10.453	nw.	48	ne.
New Brunswick.	.....	.....	.....	.....	29.0	-	50	36.3	9	21.8	25	3	3.51	.....	.....	.....	.....	.....	.....
Baltimore.	76	30.00	30.09	1.16	34.6	-2.4	59	40.7	18	28.4	24	5	22.465.3	2.67	-	0.57	4.440	nw.	39	ne.
Washington City.	112	29.99	31.12	1.22	42.5	-0.5	62	50.4	24	34.6	26	6	23.470.8	3.74	-	0.62	6.215	nw.	45	ne.
Cape Henry.	685	29.36	30.13	1.28	38.2	-0.8	56	46.2	19	30.3	29	6	24.265.0	5.14	-	0.24	4.41	sw.	.....	.....
Norfolk.	43	30.07	30.11	1.23	41.4	-1.6	64	48.9	25	33.8	36	9	2.08	4.169	1.41	-	7.369	nw.	42	nw.
S. Atlantic States.																				
Charlotte.	808	29.27	30.14	0.99	42.9	-1.1	68	52.2	24	33.6	31	3	31.171.2	3.81	-	1.31	3.735	sw.	24	w.
Hatteras.	11	30.11	30.13	1.09	47.0	0.0	57	53.5	31	40.6	26	5	40.880.8	6.01	-	0.36	11.848	ne.	42	nw.
Kitty Hawk.	.....	.....	.....	.....	46.4	-	67	53.8	28	39.1	23	8	3.34	.....	.....	.....	.....	.....	.....
Raleigh.	388	29.70	30.14	1.16	41.3	-	67	50.1	23	32.5	29	4	28.867.4	3.57	-	1.95	5.061	sw.	27	nw.
Southport.	.....	.....	.....	.....	46.4	-0.6	74	54.7	26	38.1	26	9	3.34	.....	.....	.....	.....	.....	.....
Wilmington.	78	30.06	30.15	1.00	47.4	-0.6	74	57.1	26	37.7	34	7	37.478.8	0.61	-	3.07	5.972	ne.	36	nw.
Charleston.	52	30.10	30.15	0.70	51.4	-0.4	56	59.4	34	43.3	27	5	43.783.0	1.01	-	2.81	6.027	w.	30	nw.
Columbia.	.....	.....	.....	.....	46.0	-	68	57.1	25	35.0	30	10	3.97	.....	.....	.....	.....	.....	.....
Augusta.	183	29.99	30.19	0.76	48.6	+ 0.6	71	59.2	28	38.1	34	5	36.874.6	1.18	-	2.69	2.594	w.	24	w.
Savannah.	87	30.08	30.18	0.66	51.8	-0.2	77	60.9	31	42.7	29	6	40.273.8	2.92	-	0.82	5.405	w.	17	sw.
Jacksonville.	43	30.14	30.19	0.50	55.9	-0.1	80	66.1	30	45.7	30	6	45.678.6	1.37	-	1.92	7.369	nw.	40	w.
Florida Peninsula.																				
Jupiter.	28	30.13	30.16	0.37	64.7	-	82	72.0	44	57.4	23	7	57.782.0	2.66	-	1.47	6.689	nw.	25	nw.
Key West.	22	30.15	30.17	0.30	68.2	-1.8	80	71.7	50	64.6	21	1	60.678.0	0.36	-	1.60	8.234	nw.	39	nw.
Micco k.	36	30.17	30.21	0.38	60.6	-	81	69.8	31	51.5	30	7	50.880.2	1.32	-	0.93	3.903	w.	30	w.
Tampa.	44	30.14	30.18	0.40	60.4	-	82	68.3	38	52.5	28	3	52.484.6	0.92	-	0.77	7.628	nw.	36	w.
Titusville.	.....	.....	.....	.....	52.4	+ 1.7	71	54.0	26	41.6	27	5	4.31	.....	.....	.....	.....	.....	.....
Eastern Gulf States.																				
Atlanta.	1,139	28.96	30.18	0.57	45.4	-1.4	71	54.0	26	36.9	29	4	35.074.6	2.31	-	2.88	7.426	nw.	36	nw.
Pensacola.	56	30.14	30.20	0.63	54.5	-0.5	75	62.4	33	46.6	24	7	45.478.2	1.76	-	3.48	7.095	nw.	45	nw.
Auburn.	.....	.....	.....	.....	50.0	-	70	58.7	28	41.4	30	8	3.62	.....	.....	.....	.....	.....	.....
Mobile.	35	30.17	30.21	0.66	54.1	-2.1	76	63.7	31	44.5	29	6	46.487.4	1.55	-	3.18	6.332	n.	30	n.
Montgomery.	217	29.06	30.20	0.60	51.6	-2.6	73	61.5	29	41.6	36	4	38.668.6	1.85	-	3.41	4.030	nw.	25	nw.
Meridian.	358	29.85	30.22	0.70	49.6	-	72	60.0	25	39.1	31	3	37.473.9	2.21	-	2.42	5.976	nw.	36	nw.
Vicksburg.	222	29.94	30.19	0.78	51.4	-2.4	79	61.7	27	43.1	30	2	40.972.0	2.22	-	3.19	4.941	n.	30	sw.
University.	52	30.16	30.22	0.71	56.4	+ 1.4	80	65.0	35	47.7	29	5	45.075.0	2.58	-	2.37	5.093	w.	17	sw.
New Orleans.	54	30.19	30.27	0.71	58.8	-0.2	77	65.8	40	51.7	22	9	4.18	.....	.....	.....	.....	.....	.....
Port Eads.	.....	.....	.....	.....	61.9	+ 2.8	86	67.9	28	52.4	38	3	52.484.6	0.92	-	0.26	5.840	n.	32	n.
Western Gulf States.																				
Shreveport.	249	29.92	30.18	0.91	52.2	-4.2	76	61.6	27	42.7	35	6	42.074.1	2.33	-	2.85	5.342	se.	30	nw.
Fort Smith.	492	29.66	30.20	0.99	45.0	-4.0	77	56.1	20	33.8	43	5	33.672.3	3.89	-	1.78	7.426	sw.	16	sw.
Little Rock.	309	29.85	30.19	0.85	45.9	-1.9	74	54.3	22	37.5	34	3	36.735.2	2.83	-	1.89	4.623	n.	29	n.
Corpus Christi.	20	30.18	30.20	0.87	58.8	-	80	66.6	35	51.0	36	8	50.687.8	1.80	-	1.60	7.620	n.	29	n.
Galveston.	44	30.17	30.21	0.78	58.0	-1.1	76	63.1	37	52.8	20	4	54.287.0	1.67	-	3.16	8.845	sw.	36	nw.
Palestine.	511	29.62	30.18	0.82	53.4	-3.4	82	64.0	23	42.9	39	3	39.867.3	1.27	-	3.16	2.473	s.	24	sw.
San Antonio.	781	29.39	30.22	0.88	56.7	-2.7	86	67.9	28	45.5	39	8	40.263.0							

Table of miscellaneous meteorological data for December, 1890—Signal Service observations—Continued.

Stations and districts.	Elevation above sea level, feet.	Pressure, in inches.		Temperature of air, in degrees Fahrenheit.								Mean relative humidity, per cent.	Precipitation, in inches.	Wind.			Days with rainfall.			Precipitation data since opening of station.													
		Mean actual.	Mean reduced.	Monthly mean.	Departure from normal.	Maximum.	Mean maximum.	Minimum.	Mean minimum.	Greatest daily range.	Least daily range.			Total movement, miles.	Precipitation direction.	Maximum velocity.	Cloudless days.	Partly cloudy days.	Cloudy days.	8 a.m.—Average cloudiness, tenths.	Length of record, years.	Greatest for month.	Year.	Least for month.	Year.								
		Mean.	Monthly range.	Mean.	Mean.	Mean.	Mean.	Mean.	Range.	Range.	Mean.			Miles.	Direction.	Miles per hour.	Date	Date	Date	Sp. m.	Length of record, years.	Greatest for month.	Year.	Least for month.	Year.								
Extreme Northwest.																																	
Moorhead.....	935	29.01	30.10	0.97	23.0	+11.6	47	29.6	-18	8.6	36	6	11.0	78.6	0.25	-0.45	8,276	S.	44	NW.	26	16	11	4	34.3	1-5	10	1-74	1887	0.05	1890		
Saint Vincent.....	804	29.13	30.05	1.13	19.0	-14.0	52	29.6	-27	8.4	36	5	10.8	74.0	0.23	-0.29	6,605	S.	36	22	8	11	5	8	4	47.74	3	11	2-40	1889	0.23	1890	
Bismarck.....	1,681	28.22	30.09	0.87	24.9	-10.9	64	36.6	-7	13.2	41	6	20.3	30.0	0.21	-0.51	7,002	nw.	58	DW.	26	21	5	8	53.3	2-2	17	1-71	1884	0.08	1891		
Fort Buford.....	1,900	27.96	30.05	0.99	26.0	-14.0	56	36.5	-2	15.4	33	6	14.8	68.1	0.04	-0.64	6,740	nw.	60	DW.	26	11	12	8	35.0	4-7	12	3-08	1880	0.04	1890		
Fort Yates.....	.....	.....	.....	.....	25.8	-9.8	53	36.8	-9	14.8	34	8	.....	.....	0.70	-0.05	.....	.....	8	16	7	7	.....	9	1.98	1883	0.06	1882				
Upper Miss. Valley.					31.8	+3.8	53	36.8	.....	14.8	34	8	.....	.....	0.73	-1.38	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minneapolis.....					26.4	.....	54	35.8	.....	17.1	32	6	.....	0.18	.....	.....	6,484	w.	48	nw.	26	14	7	10	4	37.73	2	.....	.....	.....	.....
Red Wing.....	758	29.26	30.13	0.95	24.2	.....	53	31.8	1	16.7	33	6	15.2	71.7	0.15	-0.45	8,276	S.	44	nw.	26	16	13	8	6	34.3	1-5	10	1-74	1887	0.05	1890
Saint Paul.....	831	29.16	30.09	0.94	24.0	+6.0	53	32.0	3	16.0	31	5	15.6	75.0	0.10	-1.17	5,223	se.	29	nw.	26	9	14	8	6	39.3	3-1	21	2-69	1880	0.10	1890	
La Crosse.....	736	29.32	30.15	0.90	26.6	-3.6	52	35.0	2	18.1	31	6	17.6	67.6	0.38	-0.94	4,227	s.	30	w.	21	13	8	10	4	43.3	3-1	19	3-43	1875	0.19	1872	
Davenport.....	613	29.47	30.16	0.89	30.4	-3.4	57	37.9	6	22.9	33	5	19.4	68.8	0.62	-1.16	7,132	nw.	38	sw.	26	14	6	11	4	38.4	1873	0.36	1876				
Des Moines.....	869	29.19	30.14	1.00	32.3	+7.3	66	42.0	3	22.6	36	6	20.6	71.7	0.11	-1.47	6,467	nw.	36	sw.	13	21	6	4	33.4	2-3	13	2-50	1882	0.11	1890		
Dubuque.....	651	29.40	30.14	0.88	27.3	+3.3	53	34.5	1	20.1	31	3	20.4	78.6	0.82	-1.10	2,124	nw.	25	w.	20	12	12	12	5	23.3	4	18	4-08	1884	0.52	1876	
Keokuk.....	613	29.50	30.18	0.96	33.8	+4.8	57	41.7	13	25.8	32	4	22.6	69.2	0.03	-2.13	4,735	nw.	36	w.	26	15	8	8	2	34.3	3-6	20	8	58	1873	0.03	1890
Cairo.....	359	29.78	30.18	0.81	40.0	+2.0	63	40.7	20	33.3	27	4	29.6	74.0	2.91	-0.62	6,303	sw.	35	n.	12	13	5	13	10	55.3	3-4	20	8	99	1884	0.73	1876
Springfield, Ill.....	644	29.43	30.14	0.86	34.0	+2.0	60	42.2	14	25.7	30	6	21.6	67.4	0.26	-2.64	7,934	nw.	34	w.	27	11	11	9	7	4	23.3	4	21	6-18	1884	0.26	1890
Saint Louis.....	571	29.50	30.19	0.89	37.6	+2.6	63	44.3	17	31.0	32	5	27.0	70.4	1.32	-1.15	9,461	sw.	36	nw.	27	11	11	9	7	4	23.3	4	21	6-18	1884	0.18	1876
Missouri Valley.					31.8	+8.0	53	44.3	17	31.0	32	5	27.0	70.4	0.32	-0.46	9,461	sw.	36	nw.	27	11	11	9	7	4	23.3	4	21	6-18	1884	0.18	1876
Columbia.....					37.4	.....	65	48.8	7	26.1	42	10	27.2	61.0	0.38	.....	5,945	n.	33	n.	16	10	9	12	3	40.0	2	2	0.85	1880	0.14	1889
Kansas City.....	963	29.12	30.19	1.14	37.4	.....	68	45.7	14	29.1	33	4	24.2	65.6	0.63	.....	6,712	sw.	38	nw.	26	13	9	9	5	34.3	3-1	3	0.79	1888	0.14	1889
Springfield, Mo.....	1,356	28.70	30.18	0.95	40.0	.....	64	48.3	11	31.7	34	5	28.2	71.9	1.95	.....	7,223	n.	38	nw.	16	13	9	9	5	31.5	5-5	5	2.54	1878	0.05	1889
Leavenworth.....	842	29.27	30.19	1.14	37.0	+6.0	70	46.4	12	27.7	37	4	23.6	67.7	0.40	-1.26	4,432	nw.	29	sw.	13	16	4	11	2	40.4	3-0	20	5.24	1873	0.08	1889	
Topeka.....					36.5	.....	71	48.9	6	24.1	39	11	0.91	.....	.....	.....	5,351	s.	36	nw.	26	14	11	6	1	3.13	2-2	21	2-92	1870	0.08	1889
Omaha.....	1,113	28.96	30.18	0.96	34.6	+9.6	71	44.5	5	24.6	34	5	20.4	65.6	0.08	-0.95	5,351	s.	36	nw.	26	14	11	6	1	3.22	2-2	21	2-87	1887	0.08	1889	
Orete.....					34.5	.....	74	47.4	9	21.6	43	9	0.30	.....	.....	.....	5,351	s.	36	nw.	26	18	7	1	4	3.87	T.	1889	0.08	1889		
Valentine.....	2,613	27.34	30.18	0.90	32.2	.....	68	45.3	1	19.2	43	8	19.8	71.1	0.32	+0.06	7,602	sw.	52	nw.	26	12	13	6	2	3.3	2-1	6	0.84	1889	0.10	1886
Sioux City.....	1,158	28.86	30.17	0.92	31.5	.....	68	41.8	1	21.2	38	6	17.0	65.5	0.10	.....	5,735	nw.	40	nw.	26	15	9	7	3	2.73	0	2	1.1	1880	0.08	1890
Fort Sully.....	1,600	28.35	30.12	0.88	28.0	.....	62	38.4	1	21.2	38	6	17.0	70.8	0.44	-0.05	6,144	n.	54	n.	26	10	14	7	5	3.93	8	13	2.73	1883	0.08	1890
Huron.....	1,307	28.07	30.13	0.84	24.4	+6.4	64	56.1	15	12.0	42	7	12.1	67.7	0.68	-0.02	7,402	s.	48	nw.	26	18	10	3	4	2.9	2-5	10	2.09	1887	0.06	1881	
Yankton.....	1,232	28.77	30.15	0.88	31.0	+10.0	67	42.9	7	19.0	45	10	17.6	70.4	0.25	-0.55	6,714	nw.	54	n.	26	17	12	2	4	2.8	2-0	10	2.46	1877	0.07	1885	
Northern Slope.					32.4	+8.0	68	42.9	7	19.0	45	10	17.6	70.4	0.08	-0.33	6,714	n.	54	n.	26	17	10	4	3	2.03	0	17	3.86	1880	0.08	1881	
Ft. Assiniboinne.....	2,660	27.13	30.02	0.93	29.8	-10.8	56	39.1	14	25.2	46	4	18.4	67.7	0.25	-0.45	11,874	sw.	72	sw.	21	9	7	15	5	6.2	6.6	11	1.61	1880	0.08	1881	
Fort Custer.....	3,040	28.36	30.07	0.76	31.4	+8.4	58	49.9	17	22.0	34	4	18.9	68.6	0.25	-0.48	5,141	se.	40	nw.	15	11	8	12	3	4.6	3.9	12	1.87	1883	0.09	1885	
Helena.....	4,069	25.86	30.11	0.88	36.4	.....	54	36.8	2	23.5	35	4	17.4	65.4	0.82	.....	3,738	sw.	60	w.	25	10	12	9	3	5.05	6	11	4.64	1888	0.18	1889
Rapid City.....	3,280	26.64	30.13	0.80	33.6	.....	75	45.3	3	21.8	37	5	16.8	68.0	0.17	.....	5,518	w.	42	n.	26	10	15	6	4	3.03	4-4	21	5.51	1888	0.08	1881
Fort McHenry.....	5,000	25.02	30.15	0.90	36.1	+1.7	61	47.0	13	25.2	41	8	10.5	42.6	0.11	.....	9,502	nw.	46	w.	25	18	9	4	2	4.5	4-4	21	0.80	1883	0.01	1881
Fort Washakie.....	5,580	24.49	30.17	0.79	28.7																												